

LandWarNet Conference Remarks by the Secretary of the Army in Fort Lauderdale, Fla.

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BY Secretary of the Army Pete Geren

Thank you for your kind introduction and thank you for inviting me to speak to you this morning.

Your theme this year, "Conducting Information-Enabled Joint Warfighting and Supporting Operations," couldn't be more timely or relevant. (And couldn't be more difficult to say!)

What you are discussing, the technologies you exhibit, and the work you do in your organizations - whether military or civilian, government or private - are matters central to the modernization of the United States Army, and our ability with our joint partners to dominate land operations now and in the future.

The technologies you represent - whether you are inventing or acquiring them, or already using them for the defense of the United States - are a collective work that shows America at its intellectual, technical, and practical best.

We are facing an era of persistent conflict with ruthless enemies who can pop up anywhere in the world, in open warfare, and in an information war. American innovation and ingenuity in the time of this war have never been more important.

Your work is saving Soldier's lives - now - and will continue to do so.

And your work is central to the transformation of how the Army fights and how we dominate the battlefield - in this war and in the future.

Our challenges in fighting a war and transforming our Army at the same time are formidable - but not unique. Other generations of Americans - Soldiers and civilians - have faced determined enemies while driving revolutionary change in the Armed Forces - in fact, it is often the crucible of war that demands and forces the change.

The centerpiece of my message to you today is this: the purpose of Army modernization and technological innovation is to maintain dominance in land operations in support of the national military strategy in an era of persistent conflict. The goal has not changed in 232 years.

LandWarNet is central to changing how the Army fights - it seeks to integrate every element of Army modernization and seamlessly connect the Leader to the Soldier on the battlefield. And connect the soldier to the information he or she needs wherever and whenever he or she needs it.

We do not ever want to send our Soldiers into a fair fight.

Whether the terrain is urban, mountain, desert, or jungle - the weather hot or cold or wet or dry. Whether it is day or night, whether the battle is conventional or asymmetric, the Army's mission is straightforward - the Army must dominate land operations.

It is our Soldiers, and not the enemy's, who must choose the time and place of battle. To succeed, we must know at every moment where our forces are and where the enemy is



Secretary of the Army Pete Geren speaks at the LandWarNet Conference at the Grand Floridian Ball Room in Ft. Lauderdale, Fla., August 21.

before we make contact and before the enemy knows.

We ask a lot of our Soldiers every day. And they step up every day.

We ask a Soldier to put on 70 pounds of body armor, weapons, and ammo. We ask him to patrol a narrow alley way or climb a mountain in 125 degree heat or freezing temperatures, in daylight or in pitch black.

We ask him to find an enemy hiding in plain sight in a market crowded with innocent civilians, or watching him from a cave on a rugged ridgeline. We ask that Soldier to find and defeat that enemy and avoid collateral damage.

That Soldier we put in harm's way needs to know what is behind the door, or around the next corner, or over the next ridgeline. He needs to know who and what is in the car approaching the check point. And he needs to know where his buddies are.

LandWarNet must give that Soldier the information he needs and, importantly, no more than he needs.

Automated command, control, communications, and intelligence systems are complex. We must make sure we do not replace the fog of war with the fog of information overload. We need to get it just right for the Soldier -- what he needs - but not more than he needs - that will not be easy.

Your challenge is this: to remember that Soldier as you design, test, and produce the information systems required on the battlefield. Remember the conditions in which he works - and the implications of bad or late - or even too much information.

Building the network to get the right information to the right place at the right time - between the operational commanders and the Soldier in the fight - is the complex challenge LandWarNet must solve.

LandWarNet is the Army's segment of the Global Information Grid. Our goal is to wire the Soldier into the GIG ("gig"). We are changing the way a soldiers fights through the way he can communicate.

Why are we doing this? Because accurate battlefield information and timely communications are critical to mission success and have always been a challenge for Soldiers and their commanders.

To put these challenges into context and help us understand our goals, let's look at examples of how our Army fought in the past, fights today, and will fight with LandWarNet.

Consider the first American war.

General George Washington commanded an army with the same information goals our Army faces today. He had to communicate his intentions to Soldiers and commanders at every echelon and obtain information from them about the enemy and the battlefield.

At the outset of an operation, George Washington would have had a general understanding of his own forces - size, strength, and disposition. But even what he knew of his own forces was degraded with the passage of time.

Much of what he knew about the enemy was pure conjecture - based on information that was hours and often days old, pieced together on maps that were neither accurate nor standard. For General Washington's bird's eye view was information shared by a soldier from a perch in a tall tree.

His communications were face-to-face or written, and delivered by runners or riders. He controlled what he could see and those close enough to hear him. Unit movements were marked by flags.

Knowledge of the enemy came from physical contact with the enemy in battle, or by scouts and forward commanders.

The "fog of war" was a literal truth. Once a battle began, the field of battle could fill quickly with smoke - limiting vision to yards, not miles. Units moving at night could become disoriented, disorganized, and just plain lost.

Two centuries later during Desert Storm, Seventh Corps commander General Freddie Franks controlled the most powerful Corps ever fielded - two U.S. armored divisions and one British, one U.S. mechanized infantry division, and one U.S. armored regiment.

It was the culmination of a decade of Army modernization - the Abrams tank, the Apache helicopter, the Patriot missile system. Yet General Franks faced many of the challenges faced by General Washington.

But, for all the advances in technology, what he as a commander needed to know and tell his commanders - the size, strength, and disposition of the units of the Iraqi Republican Guards - remained largely conjecture.

In an offensive fight across 200 kilometers over 5 days, Seventh Corps commanders and Soldiers relied mostly on line-of-sight radio communications between tactical vehicles. Radio range was 15 to 20 kilometers.

Global Positioning Satellites told commanders their own locations but they often didn't know where their units were because they were out of radio range. Once the battle began and 5,000 American vehicles moved in the direction of the enemy, General Franks had to rely on scouts and forward units to locate the enemy - at places chosen by the enemy.

The superior skills of our Soldiers and our superior tactical technology won every fight. But information voids and information sharing within a unit and between Services remained constrained by technology.

Fast forward a decade to Operation Iraqi Freedom -- the invasion of Iraq. General Scott Wallace commanded Fifth Corps with the equivalent of three divisions. He needed the same information as Generals Washington and Franks - the size, strength, and disposition of friendly and enemy forces - in real time.

He had the task of marshalling an attack across 400 kilometers of enemy occupied territory in his move to Baghdad.

But in ten years, communications technology had moved ahead dramatically. Blue Force tracker and related systems gave General Wallace and his soldiers situational awareness down to company and platoon level.

On a common map, a tank commander could see the location of friendly forces, and could use text messages to convey near real-time size and disposition of enemy forces - all this relayed by satellite.

There were still significant information challenges. Dismounted Soldiers still could not see where they were in relation to mounted Soldiers. And only Division commanders had on-the-move satellite communications. Individual soldiers dismounted and detached from their units faced the same challenges as their Revolutionary War ancestors - he could know only as far as he could see - but his fog was dust.

Most of the force relied - still - on line-of-sight radio communications. And Blue Force Tracking was available only down to platoon vehicles.

But General Wallace's soldiers had situational awareness unavailable to General Franks and beyond the imagination of soldiers in conflicts before Desert Storm. The history of warfare shows us that the fundamental information needed by commanders and Soldiers has not changed - accurate and current knowledge of friendly and enemy forces - their size, strength, and disposition - in order to make decisions faster than the enemy, to see and beat them -

before they even know you're there.

And remember, no matter how good the General - and the ones I named are among the very best - their plans going into battle never survive first contact with the enemy.

Commanders and Soldiers need the constant flow of updated and accurate information - up from the battlefield to commanders at every level - and back down to the Soldier at the tip of the spear.

All of you gathered here today are partners in the challenge to empower commanders and Soldiers with the timely and accurate information they never have had before - to give them the ability to pierce the fog of war and know more about the enemy than the enemy knows about himself.

Again, we do not want to send our Soldiers into a fair fight.

LandWarNet will empower Soldiers with a common operating picture and situational awareness they need to do their job.

Our enemy will fight us when and where he thinks he can strip away the advantage of our technologies - in crowded streets or in remote regions or, as we saw on 9/11, at home attacking civilians. Our challenge is to give our soldiers the edge - in whatever battlespace the enemy chooses - to take the fight to the enemy on our terms - not his.

It is LandWarNet that will enable every Soldier - down to the company, squad, and team - to access live feeds from unmanned aerial systems, to know where his fellow Soldiers are on the battlefield, and communicate with them across whatever distance is required.

It is LandWarNet that will connect systems and individual Soldiers to a network of information that was not even available to General Wallace as late as 2003.

With LandWarNet, we will give Soldiers and commanders continuous, on-the-move information about the size, strength, and disposition of the enemy and our own forces. Before the fight and during the fight.

That Soldier in that alleyway or at the mouth of that cave, down at the platoon, squad, and team level, will have manned and unmanned systems feeding him the information he needs. He will know in that moment of decision what is in that cave without exposing himself to the risk of entering it - and that information will be shared across the battlefield.

And that Soldier's commanders will no longer depend on line-of-sight radio with ranges limited by terrain or urban landscapes. They will see what he sees. They will know where he is - and know what he knows.

And whether that Soldier is mounted or unmounted, halted or moving, he will have far more of the information he needs to make a decision in those moments calling for decisions and filled with adrenaline.

Information - timely information - will replace conjecture and guesswork.

That is what LandWarNet is about, and Battle Command, and Future Combat Systems.

That future is now. We are spinning out the first of the FCS technologies - unattended ground sensors, unmanned aerial vehicles and unmanned ground vehicles.

Instead of line-of-sight radio and up-and-down satellite signals, LandWarNet and FCS will give us a three-dimensional mesh of ground, aerial, and satellite platforms and nodes - with the Soldier on the ground at the center.

As we design the systems we need, we must keep information security in mind.

Our challenge is to solve Army and Joint issues around information classification and security. Balancing the need for security and the urgent needs on the battlefield will not be easy. We're working on it and I know we'll get it right for the Soldier.

And while we're at it, here's a related challenge to our industry partners: help us build the cheap, secure radios with GPS that we need for the Soldier.

Our Soldiers step up every day. It is our obligation as leaders and technologists to step up every day, and step up the right way.

LandWarNet, FCS, Battle Command, and all that these technologies entail, have the full attention of Army leadership. We are creating a new LandWarNet Directorate in the G-3, in coordination with the CIO/G-6, to help synchronize the efforts across the force.

And our Soldiers are paying close attention, too. What our Soldiers want to know is this: are their leaders - are we - doing everything we can - every day - to give them the information, equipment, and training they need today and for the future?

Today we have the best led, best equipped, best trained Soldiers in the world. With your help, we will still be able to say that five, ten, and twenty years from now.

Predicting the future is difficult. We will never get it exactly right and we may get it flat wrong. Our insurance policy if we get it wrong is readiness across the full spectrum of threats - your work is key to that goal.

Secretary Gates has said, "Five times in the last 90 years, the United States has disarmed after a conflict - World War I, World War II, Korea, Vietnam, and then the Cold War." We cannot afford that mistake again. But, today's world - it is not sufficient not to disarm - we must push ahead.

What shape the future will take - the who, what, where, when, why, and how of it - is not clear - and will be only in hindsight. In the words of my teenager, we must be ready for "whatever."

What we do know is there will be conflict. We know the interests of the United States will be challenged and we will be drawn in. We remember what President Reagan said years ago, "We never got in a war because we were too strong." And what passes for strength today could be irrelevant tomorrow. Cutting edge technology will be on the cutting room floor tomorrow.

In modern warfare, in the global conflict we face, bigger is not necessarily better and it is not sufficient. Iraq shows we cannot count on engaging the enemy at long range, we can never provide enough armor. Our asymmetric advantage is a highly trained and skilled soldier - empowered with information able to outthink and outmaneuver an enemy still hobbled by the fog of war.

LandWarNet is our foundation for the information empowerment of the Soldier - ensuring that our Soldiers can see first, understand first, and act first.

The challenge of fighting a war and transforming the Army at the same time is an imperative.

The demands of the wars in Iraq and Afghanistan and the threats over the horizon give us no choice but to transform. The demands of war enable us to make hard decisions about the future that we might never be able to make in peacetime.

The Army is a big organization - 1.3 million people including our Civilians. It takes decades to modernize a force as large as our Army. Our major weapons platforms - our Abrams tanks

and Bradley Fighting Vehicles and Apache helicopters - are older than most of the Soldiers fighting in them. There are limits to our ability to take the technological miracles you create and instill them in those aging platforms. We cannot afford a modernization holiday.

The decisions we make today - the work we are doing now - will shape not only what the Army looks like 20 years from now, but must change the way we fight in the coming months and years. The decisions we don't make today also will shape the Army 20 years from now.

Some would argue that, for Americans, technology is the easy part.

Perhaps the hard part will come in training leaders and Soldiers to use the new technology. It must be integrated into the existing force by changing the doctrine - the way our Army fights - to maximize the effective use of the new technology.

Everything we do must be built around that Soldier on the ground. Where seconds make the difference in success or failure. We want to give our Soldiers the critical pieces of information needed to survive and dominate the battle space.

We want to give commanders and individual soldiers the information they need to do their job and choose where and when to fight the enemy - and not let the enemy choose for us.

That is the Common Operating Picture we seek - every friendly element in the battle space having access to the information they need to make the right decisions - to survive and dominate.

The Army and industry must work together to make all this happen. The creation of these vital Army technologies will require close partnerships and effective teaming.

In addition to the technology you offer, you can help us tell the story of LandWarNet and the power of information in revolutionizing the way we man, train, and equip our Soldiers for today's fight and for tomorrow's challenges.

Think again of the Soldier on foot patrol. What would help him or her right now? What information gets to the vehicle gunner and the helicopter pilot supporting him? What gives them the edge in battle? What will save his or her life?

In this era of persistent conflict in which we find ourselves, and in which we likely will face well into the future, we must get it right for the Soldier. We are counting on that Soldier - and that Soldier is counting on us?

I want to thank especially our Signaleers for the amazing work you are doing for our Soldiers.

And thank all of you again for the work you do and for inviting me here this morning.